## **Appendix B**

# EIA-819M Monthly Oxygenate Telephone Report

The 819M, "Monthly Oxygenate Telephone Report," provides production data and preliminary stock data for fuel ethanol and methyl tertiary butyl ether (MTBE) in the United States and major U.S. geographic regions. These data have been published in the *Weekly Petroleum Status Report* (WPSR) and the *Petroleum Supply Monthly* (PSM) since March 1992.

Data are collected from a sample of respondents reporting on the Monthly Petroleum Supply Reporting System surveys. Final data on production and stocks of fuel ethanol and MTBE are presented in the Detailed Statistics section of the *PSM* beginning with the March 1993 issue. The quantity of oxygenates blended into motor gasoline previously published in this appendix is now presented in the Highlights section of the *PSM*.

Table B1. U.S. Summary Table, December 2001

	Decer	nber 2001	Noven	nber 2001	Year-to-Date			
Products	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day		
Fuel Ethanol								
Production	3,836	124	3,794	126	42,020	115		
Stocks	4,013	_	3,785	_	_	_		
MTBE								
Production	6,134	198	6,472	216	77,539	212		
Stocks	7,923	_	8,059	_	· —	_		

R = Revised data.

Source: Energy Information Administration (EIA) Form EIA-819M, "Monthly Oxygenate Telephone Report."

Table B2. Monthly Fuel Ethanol Production and Stocks by Petroleum Administration for Defense Districts (PADD)

(Thousand Barrels per Day, Except Where Noted)

District/Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Total U.S.				'	'			-		'		
Production												
2000	110	108	104	110	103	104	103	98	101	111	109	113
2001	115	116	113	108	108	110	112	113	116	121	126	124
Stocks (thous. bbls.)	)											
2000	3,692	4,097	3,949	4,353	4,202	4,805	4,916	4,553	4,436	4,103	3,647	3,227
2001	2,582	2,525	2,547	2,807	3,029	3,095	3,388	4,226	4,225	3,521	3,785	4,013
East Coast (PADD I)												
Production												
2000	W	W	W	W	W	W	W	W	W	W	W	W
2001	W	W	W	W	W	W	W	W	W	W	W	W
Stocks (thous. bbls.)	)											
2000	175	218	390	357	159	326	306	349	300	219	132	326
2001	270	225	176	175	151	130	137	409	397	281	288	356
2001	2.0	220	110	110	101	100	101	100	007	201	200	000
Midwest (PADD II)												
Production												
2000	109	108	103	110	102	104	103	98	101	110	109	113
2001	115	116	112	107	102	110	111	113	115	118	124	121
		110	112	107	107	110	1111	113	113	110	124	121
Stocks (thous. bbls.)		0.500	0.000	2 022	0.054	2.000	2 225	0.004	0.070	0.000	0.040	4 044
2000	2,115	2,582	2,666	3,033	2,851	3,068	3,235	2,801	2,676	2,396	2,049	1,644
2001	1,634	1,562	1,739	1,825	1,835	1,943	2,175	2,464	2,522	1,957	2,183	2,478
Gulf Coast (PADD III)												
Production												
2000	W	W	W	W	W	W	W	W	W	W	W	W
2001	W	W	W	W	W	W	W	W	W	W	W	W
		V V	V V	V V	V V	V V	VV	V V	V V	V V	V V	VV
Stocks (thous. bbls.)		01.4	640	F76	700	054	026	001	1 020	000	005	707
2000	911	914	648	576	722	851	926	981	1,030	980	985	797
2001	268	354	235	392	607	652	674	673	888	922	866	801
Rocky Mountain (PADI	D IV)											
Production	,											
2000	W	W	W	W	W	W	W	W	W	W	W	W
2000	W	W	W	W	W	W	W	W	W	W	W	W
		٧V	٧٧	VV	VV	VV	VV	٧٧	٧٧	VV	VV	VV
Stocks (thous. bbls.)		74		07	0.4	00	00	407	00	٥٢	04	00
2000	89	71	59	87	64	80	88	107	92	95	91	80
2001	76	88	104	102	134	151	147	127	125	84	109	121
West Coast (PADD V)												
Production												
2000	W	W	W	W	W	W	W	W	W	W	W	W
2000	W	W	W	W	W	W	W	W	W	W	W	W
		٧V	VV	۷V								
Stocks (thous. bbls.)		044	400	200	400	400	004	045	207	440	200	202
2000	402	311	186	300	406	480	361	315	337	413	390	380
2001	335	295	293	313	302	219	256	553	292	278	339	257

R = Revised data.

W = Withheld to avoid disclosure of individual company data.

Note: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding. Source: Energy Information Administration (EIA) Form EIA-819M, "Monthly Oxygenate Telephone Report."

Table B3. Monthly Methyl Tertiary Butyl Ether (MTBE) Production, and Stocks by Petroleum Administration for Defense Districts (PADD)

(Thousand Barrels per Day, Except Where Noted)

District/Months	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Total U.S.	I											
Production												
2000	202	207	213	223	233	242	223	226	209	210	192	160
2001	148	193	213	236	232	234	222	219	213	225	216	198
Stocks (thous. bbls.)												
2000	9,211	10,265	8,906	7,888	8,456	7,923	8,234	7,649	7,394	9,552	9,722	7,245
2001	7,891	7,938	8,439	7,947	7,824	7,959	8,354	7,406	7,493	8,125	8,059	7,923
East Coast (PADD I)												
Production												
2000	W	W	W	W	W	W	W	W	W	W	W	W
2001	W	W	W	W	W	W	W	W	W	W	W	W
Stocks (thous. bbls.)												
2000	1,856	1,672	1,718	1,232	1,037	1,387	1,552	1,494	1,412	1,970	1,712	1,370
2001	1,689	1,416	1,728	1,642	1,341	1,358	1,579	2,118	1,702	2,118	2,102	1,921
Midwest (PADD II)												
Production												
2000	W	W	W	W	W	W	W	W	W	W	W	W
2001	W	W	W	W	W	W	W	W	W	W	W	W
Stocks (thous. bbls.)												
2000	W	W	W	W	W	W	W	W	W	W	W	W
2001	W	W	W	W	W	W	W	W	W	W	W	W
Gulf Coast (PADD III)												
Production												
2000	178	182	192	197	204	212	195	199	185	191	171	139
2001	128	170	187					188		196	191	177
	120	170	107	206	202	203	194	100	183	196	191	177
Stocks (thous. bbls.)	4 000	4.004	4.407	0.577	2.500	2.500	0.700	4.045	0.007	4.700	4.005	2.000
2000	4,223	4,881	4,137	3,577	3,529	3,586	3,728	4,315	3,867	4,762	4,905	3,880
2001	3,541	3,571	4,585	4,010	3,883	3,896	3,569	2,907	3,652	4,228	3,710	3,516
Rocky Mountain (PADD	IV)											
Production	-											
2000	W	W	W	W	W	W	W	W	W	W	W	W
2001	W	W	W	W	W	W	W	W	W	W	W	W
Stocks (thous. bbls.)	* *	* *	**	* *	* *	v v	* *	**	**	**	* *	V V
2000	W	W	W	W	W	W	W	W	W	W	W	W
2001	W	W	W	W	W	W	W	W	W	W	W	W
2001	٧٧	**	**	**	**	**	VV	**	VV	vv	• •	• • •
West Coast (PADD V)												
Production												
2000	W	W	W	W	W	W	W	W	W	W	W	W
2001	W	W	W	W	W	W	W	W	W	W	W	W
Stocks (thous. bbls.)	• •	• • •	••	• •	• • •		••	••	• • • • • • • • • • • • • • • • • • • •	••	• •	•••
2000	2,996	3,574	2,803	2,820	3,634	2,680	2,731	1,685	1,997	2,729	3,016	1,896
2001	2,592	2,901	2,056	2,135	2,460	2,582	3,080	2,234	2,017	1,694	2,112	2,380
2001	2,002	2,001	2,000	۷, ۱۵۵	۷, ۲۰۰۰	2,002	0,000	2,207	2,017	1,004	ے، ۱ ا	۷,500

R = Revised data.

W = Withheld to avoid disclosure of individual company data.

Note: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding. Source: Energy Information Administration (EIA) Form EIA-819M, "Monthly Oxygenate Telephone Report."

Table D4. Monthly Methyl Tertiary Butyl Ether (MTBE) Production by Merchant and Captive Plants (Thousand Barrels per Day, Except Where Noted)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Total U.S.												
1992	98	94	89	79	90	90	101	91	104	118	128	125
1993	115	114	112	138	132	126	155	142	157	146	148	144
1994	123	140	129	140	139	115	154	166	160	164	150	144
1995	149	144	121	168	169	182	181	171	163	167	174	17
1996	173	172	182	183	194	202	197	179	186	187	183	18
1997	161	192	182	186	194	209	201	217	200	206	211	20
1998	188	176	201	209	195	204	220	217	210	202	220	22
1999	216	212	178	210	219	221	217	222	231	218	228	224
2000	202	207	213	223	233	242	223	226	209	210	192	160
2001	148	193	213	236	232	234	222	219	213	225	216	198
Merchant Plants												
1992	65	62	58	48	55	53	63	53	61	76	81	77
1993	63	66	67	87	75	70	89	79	87	76	81	7
1994	63	76	66	73	72	50	73	89	90	81	84	69
1995	76	68	61	86	85	91	90	88	79	90	97	9:
1996	94	92	93	95	109	123	111	96	101	98	94	8
1997	72	106	99	92	93	104	106	113	99	108	109	108
1998	97	77	104	107	94	106	114	108	100	100	117	114
1999	105	111	83	114	114	110	102	104	110	111	118	110
2000	101	99	106	116	118	121	108	112	100	114	97	68
2001	50	89	101	115	114	112	107	102	99	116	109	101
Captive Plants												
1992	33	32	31	31	35	37	38	38	43	42	47	48
1993	52	48	45	50	57	55	67	62	70	70	67	69
1994	60	64	63	67	67	65	81	78	70	83	66	7
1995	73	76	60	83	84	91	91	83	84	76	78	7
1996	79	80	89	89	84	79	85	83	85	89	89	9
1997	89	86	83	94	102	105	95	104	101	98	102	9
1998	91	99	97	102	101	99	106	109	111	102	104	10
1999	110	101	94	97	104	111	114	118	120	107	110	11-
2000	100	108	107	107	115	121	116	114	109	96	95	9:
2001	98	104	112	121	118	122	115	117	114	109	107	9

R = Revised data.

Note: • Geographic coverage is the 50 States and the District of Columbia. • Totals may not equal sum of components due to independent rounding.

# Form EIA-819M Monthly Oxygenate Report Explanatory Notes

## **Background**

Beginning November 1992, the Clean Air Act Amendments of 1990 required that all gasoline sold in carbon monoxide nonattainment areas have an oxygen content of 2.7 percent (by weight) during wintertime months. Beginning in 1995 further requirements are that only reformulated gasoline having an average oxygen content of 2.0 percent be sold in the nine worst ozone nonattainment areas.

In 1992, the Energy Information Administration (EIA) conducted a frame identifier survey of companies that produce, blend, store, or import oxygenates. The purpose of this survey was to (1) identify all U.S. producers, blenders, storers, and importers of oxygenates; and (2) collect supply, and blending data for January - June, 1992 inventory data on those oxygenates blended into motor gasoline.

#### Overview

In order to continue to provide relevant information about U.S. and regional gasoline supply, the EIA has begun an oxygenate data collection program. The Form EIA-819M, "Monthly Oxygenate Telephone Report" collects information on oxygenate production and stocks by Petroleum Administration for Defense Districts (PADD's). Data are aggregated and presented on Tables B1-B3 of this appendix as follows:

- Table B1. U.S. Summary Table, Current Month
- Table B2. Monthly Fuel Ethanol Production and Stocks, by PADD
- Table B3. Monthly Methyl Tertiary Butyl Ether (MTBE)
  Production and Stocks, by PADD

All data are displayed in thousand barrels (42 U.S. Gallons per Barrel) or thousand barrels per day.

#### **Collection Methods**

Data for the EIA-819M survey are collected beginning on the fifth working day of each month. Information is solicited by telephone or can be transmitted to the EIA by facsimile. Receipt of the data is monitored using an automated respondent mailing list. Additional follow-up telephone calls are made to nonrespondents prior to the publication deadline.

## **Sample Frame**

The sample of companies that report on the Form EIA-819M was selected from the universe of companies

that reported on Forms EIA-810, 811 and 812. The universe consisted of (1) operators of facilities that produce (manufacture or distill) oxygenates (including MTBE plants, petrochemical plants, and refineries that produce oxygenates as part of their operations); (2) operators of petroleum refineries; and (3) operators of bulk terminals, bulk stations, blending plants, and other non-refinery facilities that store and/or blend oxygenates.

## Sampling

The sampling procedure used for the survey form EIA-819M is the cut-off method and was performed using software developed by the EIA's Office of Statistical Standards. In the cut-off method, companies are ranked from largest to smallest on the basis of quantities reported (oxygenate production and oxygenate stocks). The frame is updated annually. Companies are chosen for the sample beginning with the largest and adding companies until the total sample covers approximately 90 percent of the total for each oxygenate item and supply type by geographic region (PAD Districts I through V) for which data may be published.

### **Frames Maintenance**

The Petroleum Division (PD) maintains complete lists of respondents to its monthly surveys. Each survey has a list of companies and facilities required to submit petroleum activity data. This list is known as the survey frame. Frame maintenance procedures are used to monitor the status of petroleum companies and facilities currently contained in each survey frame as well as to identify new members to be added to the frame. As a result, all known petroleum supply organizations falling within the definition of "Who Must Submit" participate in the frames survey.

The activities for frames maintenance are conducted within two time frames: monthly and annually. Monthly frames maintenance procedures for the EIA-819M focus on examining several frequently published industry periodicals that report changes in status (births, deaths, sales, and acquisitions) of petroleum facilities producing, transporting, importing, and/or storing crude oil and petroleum products. These sources are augmented by articles in newspapers, letters from respondents indicating changes in status, and information received from survey systems operated by other offices. Survey managers review these sources to monitor changes in company operations and to develop lists of potential respondents. These activities assure coverage of the reporting universe and maintain accurate facility information on addresses and ownership.

To supplement monthly frames maintenance activities and to provide more comprehensive coverage, the PD conducts an annual frames investigation. This annual evaluation results in the reassessment and recompilation of the complete frame.

## **Quality Control and Data Revision**

#### **Quality Control**

Survey forms are periodically reviewed for completeness, meaningfulness, and clarity. Modifications are made, when needed, to maintain efficient measure of the intended data items and to track product movement accurately throughout the industry. Through this process, the EIA can maintain consistency among forms, minimize respondent burden, and eliminate ambiguity.

Response error, the difference between the true value and the value reported on the survey form, is the major factor affecting the accuracy of Petroleum Supply Reporting System data. Among the causes of response error are data entry error, error due to misunderstanding of what is to be reported, and error due to the use of preliminary data when final data are not available. Errors can also be introduced during data processing by transcribing the wrong number or putting it in the wrong cell.

To help detect and minimize reporting errors, automated editing procedures are used to check current data for consistency with past data as well as for internal consistency. Flagged data are thoroughly checked before being aggregated into the published total.

The 819M oxygenate data serve as leading indicators of the oxygenate data which are published in the *Petroleum Supply Monthly*. To assess the accuracy of the 819M statistics, data are compared with the monthly aggregate data reported on EIA-810, 811 and 812 surveys.

#### **Response Rate**

The response rate is usually 98 to 100 percent. Chronic nonrespondents and late filing respondents are contacted by telephone or in writing and reminded of their requirement to report. Companies that file late or fail to file are subject to criminal fines, civil penalties, and other sanctions as provided by Section 13(i) of the Federal Energy Administration (FEA) Act.

#### Resubmissions

Resubmissions are any changes to the originally submitted data that were either requested by the EIA or initiated by the repondent. If the resubmissions change a published aggregate by more than 5 percent, a revised number accompanied by an "R" is published in the next issue of the WPSR. Such revisions occur only rarely.

## **Data Imputation and Estimation**

In any survey, nonresponse can be a major concern because the effects can cause serious bias in survey results. Nonresponse occurs whenever requested information is not obtained from all units in a survey. The EIA-819M has a very high response rate. Whenever

survey responses are not received in time to be included in published statistics, the data are imputed. Although imputing for missing data may not eliminate the total error associated with nonresponse, it can serve to reduce the error. The data reported in the previous month are used as imputed values for missing data.

After the data files have been edited and corrected, aggregation is done for production and stocks by each geographic region. Estimation factors (universe total divided by sampled total), which are derived from the previous year's data, are applied to each cell to generate a sampling frame total for the current time period.

When new companies come on line during the year, their data cannot be added to the sample since there is no benchmark data for them. In order to portray more accurately total oxygenate activity, these data are included in a certainty strata which is then added to the sampling frame total.

## Confidentiality

The Office of Legal Counsel of the Department of Justice concluded on March 20, 1991, that the Federal Energy Administration Act requires the EIA to provide company-specific data to the Department of Justice, or to any other Federal agency when requested for official use, which may include enforcement of Federal law. The information contained on this form may also be made available, upon request, to another component of the Department of Energy (DOE), to any Committee of Congress, the General Accounting Office, or other Congressional agencies authorized by law to receive such information. A court of competent jurisdiction may obtain this information in response to an order.

The information contained on this form will be kept confidential and not disclosed to the public to the extent that it satisfies the criteria for exemption under the Freedom of Information Act (FOIA), 5 U.S.C. 552, the DOE regulations, 10 C.F.R. 1004.11, implementing the FOIA, and the Trade Secrets Act, 18 U.S.C. 1905.

Upon receipt of a request for this information under the FOIA, the DOE shall make a final determination whether the information is exempt from disclosure in accordance with the procedures and criteria provided in the regulations. To assist us in the determination, respondents should demonstrate to the DOE that for example, their information contains trade secrets or commercial or financial information whose release would be likely to cause substantial harm to their company's competitive position. A letter accompanying the submission that explains (on an element-by-element basis) the reasons why the information would be likely to cause the respondent substantial competitive harm if released to the public would aid in this determination. A new justification does not need to be provided each time information is submitted on the form, if the company has previously submitted a justification for that information and the justification has not changed.